



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/200,631	11/30/1998	CURTIS L. ASHTON	1569/1570	9598
22193	7590	10/28/2004	EXAMINER	
QWEST COMMUNICATIONS INTERNATIONAL INC LAW DEPT INTELLECTUAL PROPERTY GROUP 1801 CALIFORNIA STREET, SUITE 3800 DENVER, CO 80202			ENG, GEORGE	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/200,631

Applicant(s)

ASHTON ET AL.

Examiner

George Eng

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 13-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-11 and 13-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/17/2004 has been entered.

### ***Response to Amendment***

2. This Office action is in response to amendment filed 7/2/2004. Accordingly, claims 2-3 and 12 are canceled and claims 1, 4-11 and 13-30 are pending for examination.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 2643

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 4-11 and 13-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bigham et al. (US PAT. 5,740, 075 hereinafter Bigham) in view of Mercadante et al. (US PAT. 5,889,465 hereinafter Mercadante).

Regarding claim 1, Bigham discloses a system for powering a fiber optic communication network, which transmits communication data between a telecommunications service provider and a remote user device as shown in figure 3B. The system comprises an optical network node (ONU 1210) for converting the communication data from a digital optical state to a digital electrical state (col. 21 lines 25-23), a fiber optic communication medium (1190) configured to transfer the communication data between the telecommunications service provider (1333), and the optical network node (col. 20 lines 41-42 and col. 26 lines 31-46), a power source (1211) and a battery reserve power configured to supply an electrical supply voltage to power the optical network node, and an electrical transmission medium (1212) configured to transmit electrical supply voltage from the electrical power source to the optical network node (col. 21 lines 5-28 and col. 26 lines 55-59). Bigham differs from the claimed invention in not specifically teaching an alarm system incorporated within the electrical power source to monitor the operation of the electrical power source and transmit electrical power source operation information to the telecommunication service provider. However, Mercadante teaches a power service unit as shown in figure 1 incorporated with a charger/rectifier, a backup power supply, and power

Art Unit: 2643

quality reporting system, read as an alarm system, being configured to monitor an operation of the power service unit and to contact a central monitor, i.e., a telecommunications service provider, for transmitting the power service unit operation information (abstract and col. 5 line 31 through col. 6 line 54) in order to provide conditioned power to equipment at a remote location with the ability to provide notification in an event there is an operational disruption , thereby maintain the integrity of the operation. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bigham in having the alarm system incorporated within the electrical power source to monitor the operation of the electrical power source and transmit electrical power source operation information to the telecommunication service provider, as per teaching of Mercadante, because it provide conditioned power to equipment at a remote location with the ability to provide notification in an event there is an operational disruption , thereby maintain the integrity of the operation.

Regarding claims 4-7, Bigham disclose that the power source (1211) is located proximate to the optical network node (1210), which is remote from the optical network node and supplies power to plurality of the optical network node (figure 3B). Note while it is notoriously well known in the art that power source is capable of shifting location due to the design purposed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bigham in having power source (1211) located proximate to telecommunications service provider or, as well as a digital loop carrier based upon the design purposes.

Regarding claims 8-10, Bigham teaches the remote user device comprising telephone (1219), a computer (1217), and a television (figure 3B).

Regarding claims 11 and 17, Mercadante teaches the power supply comprising a primary power source for providing power during normal operation and a secondary power source for providing power when the primary power source is inoperable (col. 6 lines 23-33), wherein the power source comprises a plurality of rectifiers, a plurality of converters, a plurality of current limiters, and a plurality of batteries configured to supply the DC voltage to the electrical power source (figure 1).

Regarding claim 13, Mercadante discloses one or more conducting medium to connect the alarm system in the electrical power source to an optical network node, i.e., network interface device, for relaying power source operation information, i.e., alarm detection, to the telecommunications service provider over the fiber optic communication medium (figure 1).

Regarding claim 14, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Regarding claim 15, Bigham teaches the optical network node comprising an optical network unit (col. 20 line 40).

Regarding claim 16, Bigham discloses the system comprising the optical network (ONU 1210) functioning as a digital subscriber line access multiplexer for converting the communication data from a digital optical state to a digital electrical state (col. 21 lines 25-23).

Regarding claims 18-19, Bigham discloses an electrical conducting medium conducting the electrical supply voltage and the communication data from the optical network node and the remote user device, and a network interface device (1217) connected between the optical network and the remote user device (figure 3B).

Regarding claims 20-21, Bigham teaches to transfer digital communication data between the telecommunications service provider and an optical network unit, i.e., a digital subscriber line access multiplexer (col. 21 lines 25-23).

Regarding claims 22-23, Mercadante teaches to transmit alarm signal for specifying pertinent data regarding the power loss (col. 6 lines 7-22) so that the alarm signal obviously comprises transmitting power level and operational data to the telecommunications service provider.

Regarding claim 24, the limitations of the claim are rejected as the same reasons set forth in claims 11 and 17.

Regarding claims 25-26, the limitations of the claims are rejected as the same reasons set forth in claims 18-19.

Regarding claims 27-28, Mercadante teaches the power source information is selected from a group consisting of information about an AC power source, information about a rectifier's voltage, information about the converter's voltage and information about a current limiter's current (col. 6 lines 7-17).

Regarding claims 29-30, Mercadante teaches a power quality reporting system using a telephone communications link, other than the fiber optic communication medium, to notify a central location for power disruption in order to provide a reliable, flexible and conditioned power to remote location (col. 7 lines 5-9).

Art Unit: 2643

*Response to Arguments*

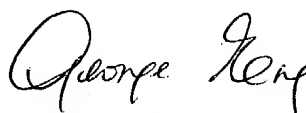
5. Applicant's arguments with respect to claims 1, 4-11 and 13-30 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tue-Fri 7:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Eng  
Primary Examiner  
Art Unit 2643